

## CLAIMS

What is claimed is:

1. A network system for supporting mobile Internet communication comprising:  
a plurality of Routers each having unique communication address;  
a plurality of Mobile Nodes (MNs) being movable to various locations to communicate with the Internet via different Routers at different locations;  
each MN associated with a home Router;  
each Router having an associated Mobile Node Location List identifying each MN for which the Router is the home Router and the communication address of a Router corresponding to a current location of each such MN; and  
each MN movable from an old location where the MN communicates with the Internet via one Router to a current location where the MN communicates with the Internet via a different Router by communicating to the MN's home Router the communication address of the different Router as the communication address corresponding to the MN's current location whereby a data communication from a corresponding node (CN) to a selected MN is communicated to the selected MN by accessing the Mobile Node Location List of the selected MN's home Router to determine the communication address corresponding to the selected MN's current location and directing the data communication to that determined communication address.
2. A method of mobile Internet communication comprising:  
providing a plurality of Routers each having unique communication address;  
providing a plurality of Mobile Nodes (MNs) being movable to various locations to communicate with the Internet via different Routers at different locations where each MN associated with a home Router;  
providing each Router with an associated Mobile Node Location List identifying each MN for which the Router is the home Router and the communication address of a Router

corresponding to a current location of each such MN; and

when each MN moves from an old location where the MN communicates with the Internet via one Router to a current location where the MN communicates with the Internet via a different Router, establishing communication ability via said different Router by communicating to the MN's home Router the communication address of the different Router as the communication address corresponding to the MN's current location whereby a data communication from a corresponding node (CN) to a selected MN is communicated to the selected MN by accessing the Mobile Node Location List of the selected MN's home Router to determine the communication address corresponding to the selected MN's current location and directing the data communication to that determined communication address.